

FIELD SERVICE BULLETIN



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ATTENTION: Service Manager

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Setting/Adjusting Rear Axle Angles: Proprietary Rear Air Suspensions **Except** FLEX Air™

This bulletin is applicable to vehicles equipped with proprietary rear air suspensions except FLEX Air™ suspensions; i.e., Air Leaf, Low Air Leaf, Low Low Air Leaf, and Air Trac suspensions. It provides a procedure to set ride height and adjust rear axle angles on those vehicles.

- This bulletin supersedes the information on “Measuring Pinion Angle” and “Setting Air Spring Height (Ride Height)” in Section 6, “Rear Suspension” of the master maintenance manual for vehicles equipped as described above. The manual will be updated in the near future to reflect the changes made by this bulletin.

The ride height of proprietary rear air suspensions is set at the factory. The specifications used are designed to provide the vehicle with the best possible axle travel and ride characteristics.

There are occasions when a customer will reset or adjust the ride height after a vehicle has been put in service. Peterbilt recommends against this for the following reasons:

- Changing the ride height results in a change in rear axle driveline angles. This situation can lead to driveline vibration.
- Changing the ride height may have a detrimental effect on axle travel, and may also result in complaints of rough ride.

Peterbilt recommends that customers be encouraged to avoid these potential problems by maintaining the ride height at the factory setting. When necessary, the rear axle angle(s) should be returned to the original factory specification. A new adjustment procedure that removes the effect of frame rake variation on pinion angles was implemented on 6/26/99 (Denton) and 8/4/99 (Madison). Using this method permits setting rear driver and interaxle driveshaft angles to provide the best possible axle travel and U-joint cancellation as well as keep torsional acceleration within specifications. The procedure and supporting information is contained in this bulletin. The special ride height tool required for this procedure is available from PACCAR Parts (see Parts Notes below).

Parts Notes

The parts referred to in this bulletin are listed below and available from PACCAR Parts using normal ordering procedure.

Part Number	Description
42-00219-001	Ride height tool (gauge)
03-08780-001, -002, -003, -004	Axle shim (for Low Air Leaf suspensions on/after 4/5/04)
Pro 3600 Anglemaster	Inclinometer (available at http://www.penntoolco.com/catalog/products/697.cfm)

Setting and Adjusting Ride Height and Rear Axle Angles



WARNING! This procedure requires servicing the vehicle with the transmission in neutral and the parking brakes released. The vehicle must be parked on a completely flat/level surface with both front wheels chocked on both sides. Failure to adequately chock the wheels may lead to the vehicle rolling into someone/something, causing an accident and possible serious personal injury and/or equipment damage.



NOTE: Suitable wheel chocks are at a minimum an 18-inch (46 cm) long 4x4

Follow this procedure to set ride height and adjust rear axle angles (pinion angles).

1. Ensure that the following tools are available:
 - Ride height tool (gauge)
 - Pro-3600 or Pro-360 Anglemaster (inclinometer)
 - Adapter for Anglemaster
2. Drive the vehicle onto a flat/level surface. Back straight out for the length of the vehicle and slowly drive back onto the flat/level surface. Gently roll to a stop. Place the transmission in neutral and set the parking brakes.
3. Chock the front wheels on both sides.
4. Release the parking brakes.
5. Ensure that the ride height gauge has the correct slide installed for the suspension on the vehicle (see “NOTES” in Figure 1).

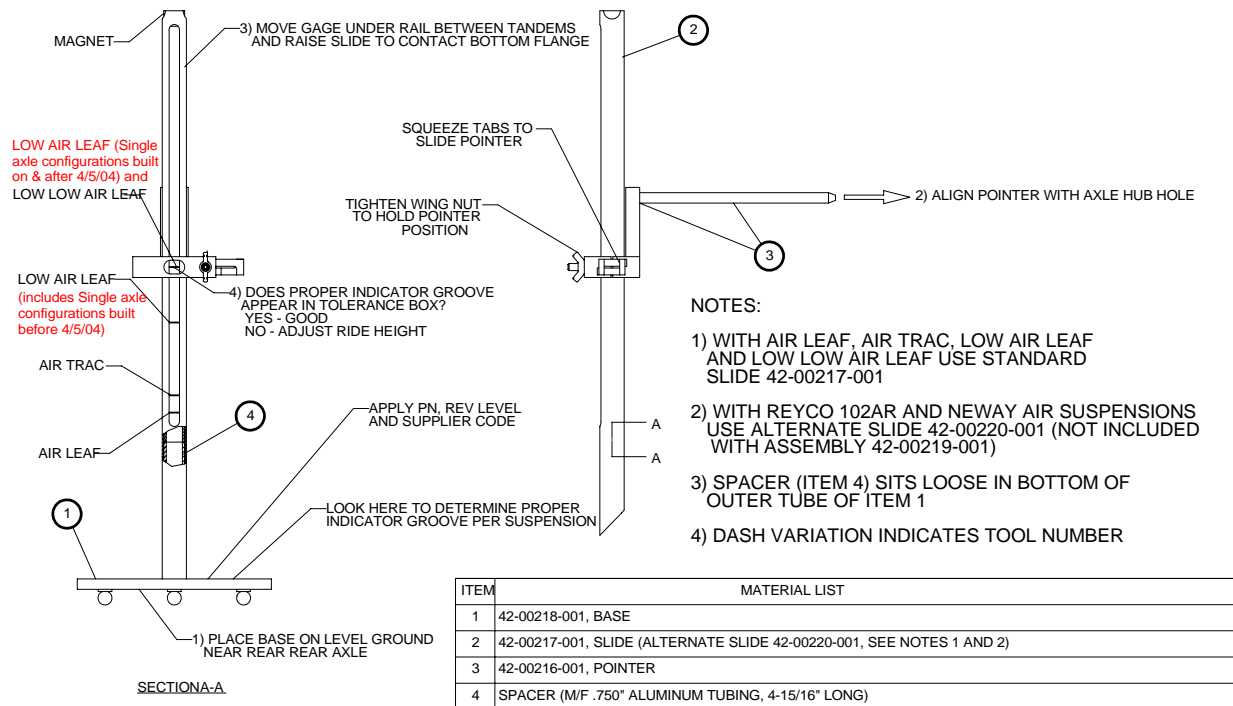


Figure 1 Illustration of Ride Height Gauge

6. Place the ride height gauge near the rearmost axle such that the base is on level ground (see Figure 1 and Figure 2).
7. Align the pointer of the gauge with the axle hub hole (see Figure 2).
 - a. Squeeze the tabs to slide the pointer into proper position.
 - b. Tighten the wing nut to hold the pointer in that position.

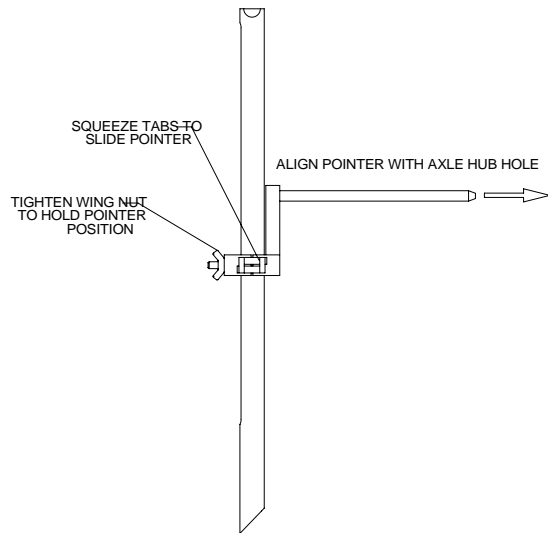


Figure 2 Illustration of Aligning The Pointer of a Ride Height Gauge

8. Move the ride height gauge under the frame rail, either forward of a single axle (but not forward of the suspension bracket) or between tandem axles (see Figure 3).



Figure 3 Illustration of Measuring The Ride Height on a Tandem Suspension

9. Raise the slide to bring the magnet at its tip into contact with the bottom flange of the frame rail.

10. Look in the tolerance box and note what indicator groove appears (see Figure 4).

- If the proper groove appears, skip to Step 16 in this procedure.
- If the proper groove doesn't appear, perform all remaining steps in this procedure.

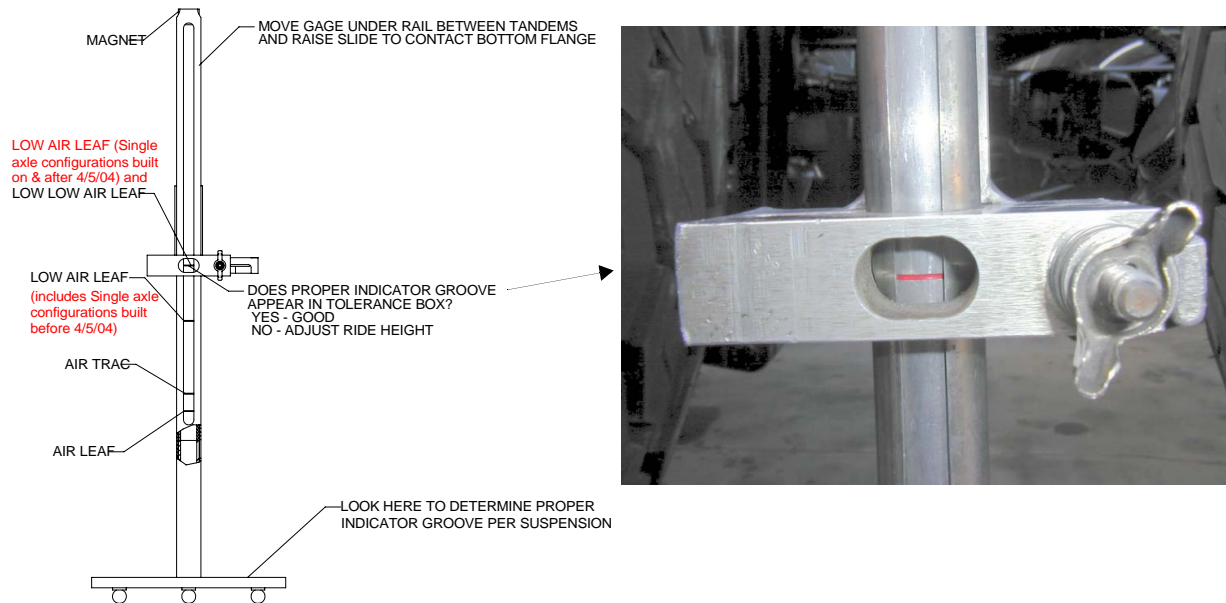


Figure 4 Illustration of Checking Ride Height Indicator

11. Loosen the fasteners mounting the height control valve to its bracket. See Figure 5 for illustrations of height control valves.

i *NOTE: At least one of the mounting holes in the height control valve bracket will be slotted to permit rotating the valve.*

12. Rotate the valve either clockwise or counterclockwise to obtain the appropriate ride height as measured with the ride height gauge.

13. When at the appropriate ride height, ensure that the height control valve lever is in the neutral position, then install either the built-in alignment pin or a 1/8-inch (3 mm) dowel.

14. Torque the mounting fasteners to 55 - 75 Lb. in. (6.2 - 8.5 N.m.).

15. Remove the alignment pin or dowel.

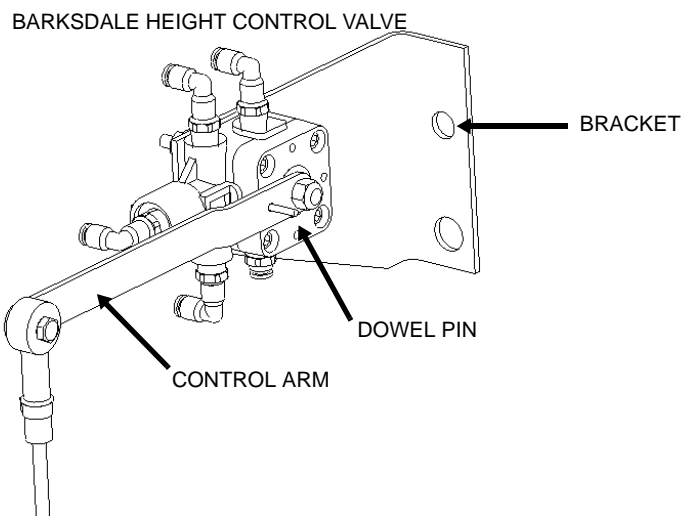
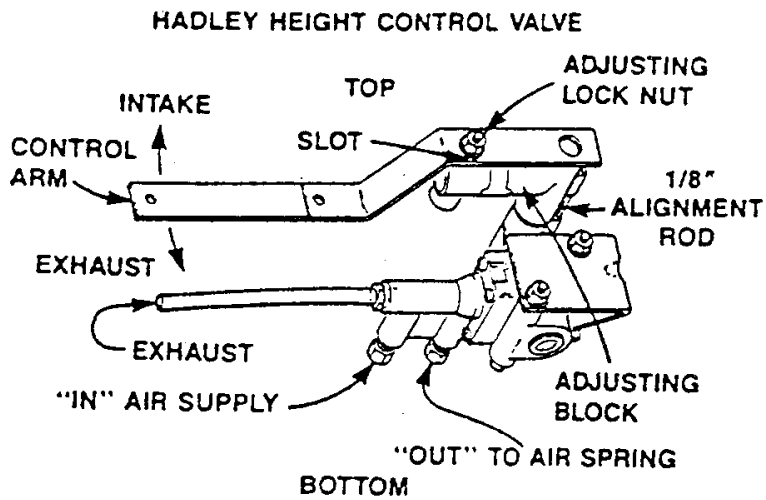
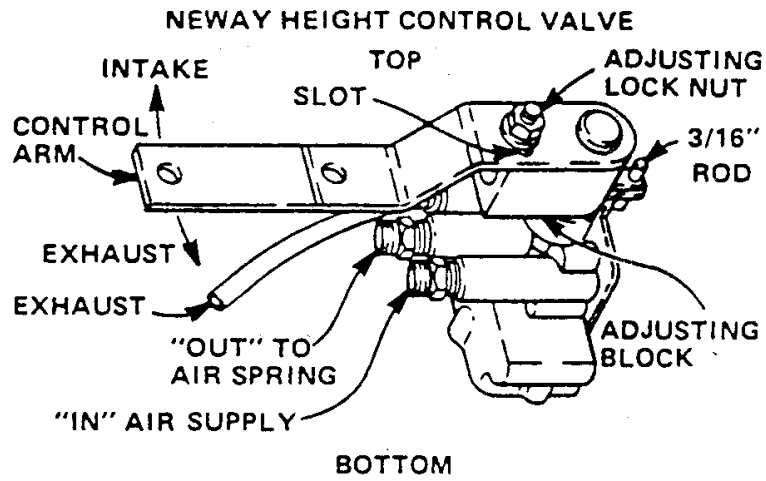


Figure 5 Illustrations of Height Control Valves



NOTE: Contact PACCAR Parts Research (1-800-477-0251) to obtain rear axle angle information for newer vehicles whose records are not yet in ECAT.

16. Obtain the specified forward rear axle angle from the vehicle's FCBM. This information is located in the vehicle's record in ECAT.
- See [F.S.B. #4-92R](#) for instructions to read rear axle angle information.
 - Refer to Figure 6 and Figure 7 for examples of rear axle angle bills.

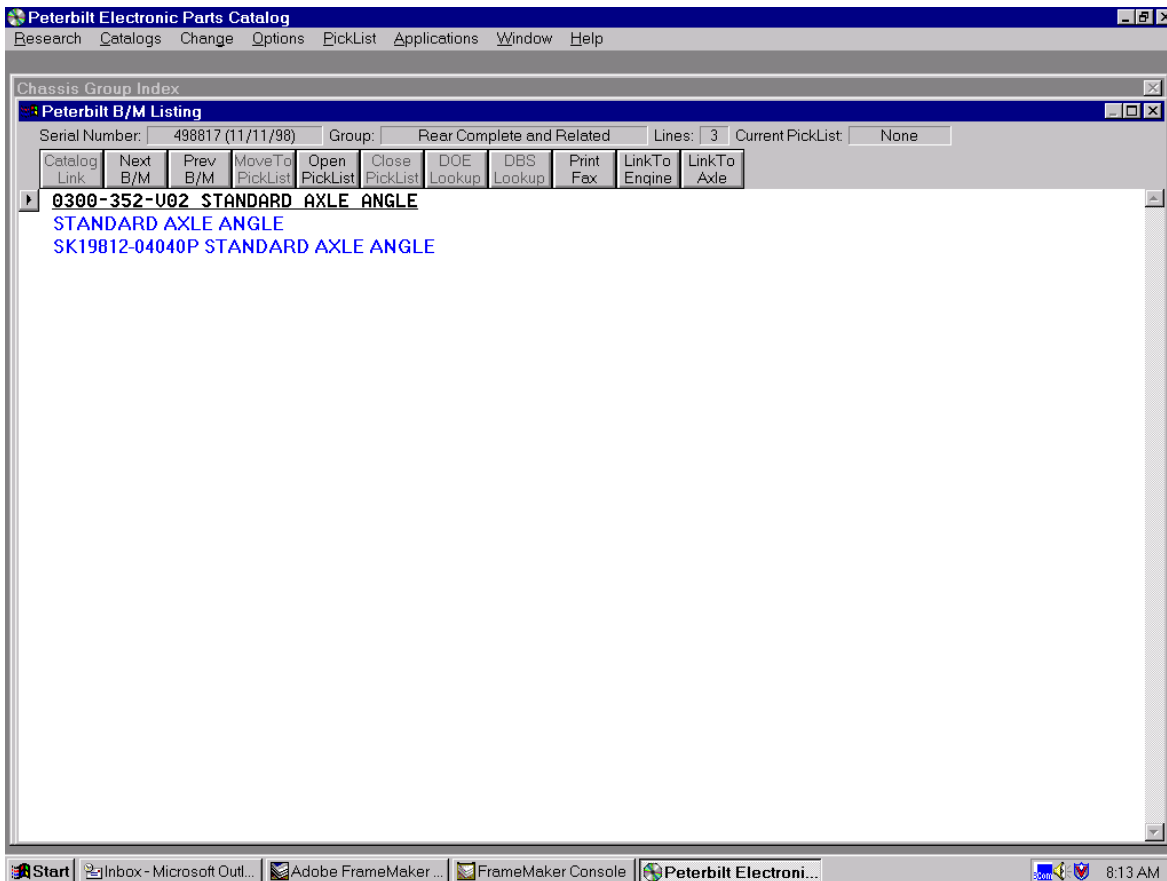


Figure 6 Example of Rear Axle Angle Information Bill (Parallel Axle Configuration)

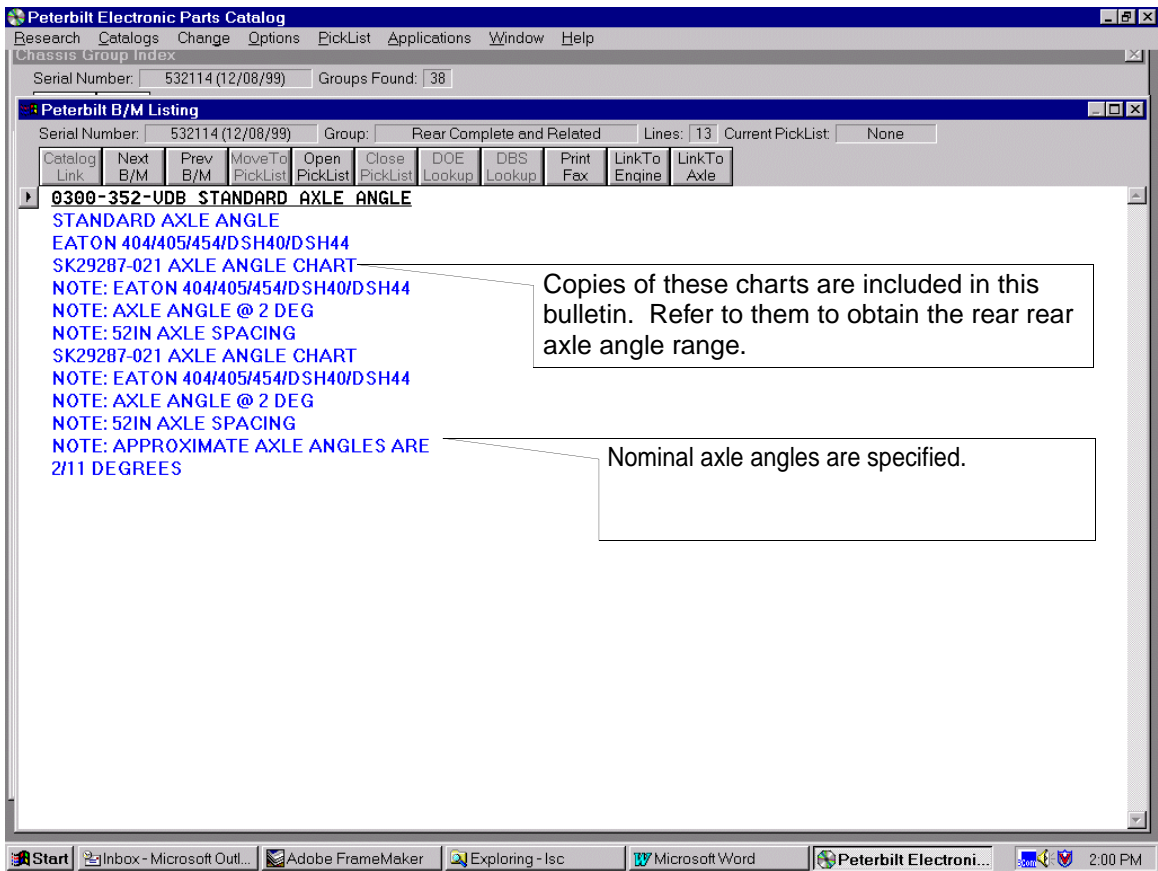


Figure 7 Example Rear Axle Angle Information Bill (Broken-back Axle Configuration)

17. Zero the inclinometer to the LH frame rail with the face of the inclinometer oriented inboard (i.e., toward the passenger side of the chassis) as shown in Figure 8 .



Figure 8 Illustration of Inclinometer on the Left-Hand Frame Rail

18. Measure and record the forward rear axle angle at either the top or bottom of the housing, near the axle seat, on the long side of the axle, with the inclinometer oriented inboard as shown in Figure 9 .



Figure 9 Illustration of Using an Inclinometer to Determine Forward Rear Axle Angle

19. Compare the forward rear axle angle you obtained to the value listed in the FCBM:

- If the angle is within ± 0.5 degree of that value, either stop (for single axle configurations) or proceed to Step 20 (for tandem axle configurations).



NOTE:

- *Shimming may not be required if the proper axle angle can be obtained by adjusting the ride height within the tolerance window.*
 - *Ensure that the specified ride height is maintained during axle angle adjustment so that a valid inclination measurement is achieved.*
 - *Low Air Leaf suspensions built on and after 4/5/04 require new axle angle shims (see [Parts Notes](#)).*
- If the angle differs by more than ± 0.5 degree from the value, shim the axle, then repeat Steps 11 through 18.

20. Turn the inclinometer off, then back on (this will zero it to true horizontal).



NOTE: If frame rake exists, the measurement that you obtain in the next step will be different from the one you obtained in Step 18. That measurement was made relative to the frame rail, while this measurement is being made relative to true horizontal.

21. Remeasure and record the forward rear axle angle (now with respect to the true horizontal) at either the top or bottom of the housing, near the axle seat, on the long side of the axle, with the inclinometer oriented inboard as shown in Figure 9 .
22. Measure and record the rear rear axle angle either at the top of the housing, next to the axle seat, or at the bottom of the housing, next to the axle clamp, on the long side of the axle with the inclinometer oriented inboard as shown in Figure 10 .



Figure 10 Illustration of Using an Inclinometer to Determine Rear Rear Axle Angle

- a. For parallel axle configurations: Compare the rear rear axle angle to the forward rear axle angle you obtained in Step 21. If the rear rear axle angle differs by more than ± 0.5 degree, shim the rear rear axle until its angle is within that tolerance.
- b. For broken-back axle configurations: Locate the forward rear axle angle (from Step 21) in the chart for the applicable axle included in this bulletin. Determine if the rear rear axle angle is within the range specified for the rear driver. If value is outside the range, shim the rear rear axle until its angle is within that range.

Administrative Notes

Peterbilt will pay for axle angle adjustment on warrantable units as per the established labor rate (Operation No. 032-2 or 033-2 applies).

This bulletin supersedes F.S.B. #3-00R dated March 30, 2001.

| **Indicates revision**



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

AXLE ANGLE CHART SK					APPLICABLE AXLES	AXLE GROUP #
52"	54"	56"	60"	72"		
SK29287-001	SK29287-002	SK29287-003	SK29287-004	SK29287-005	MERITOR 40145/44145	1
SK29287-006	SK29287-007	SK29287-008	SK29287-009	SK29287-010	MERITOR 40160/46160/46164/50160	2
SK29287-011	SK29287-012	SK29287-013	SK29287-014	SK29287-015	MERITOR 52180/52185/58180/58185	3
SK29287-016	SK29287-017	SK29287-018	SK29287-019	SK29287-020	EATON 402/403/451	4
SK29287-021	SK29287-022	SK29287-023	SK29287-024	SK29287-025	EATON 404/405/454/DSH40/DSH44	5
SK29287-026	SK29287-027	SK29287-028	SK29287-029	SK29287-030	EATON 460/461/462/463/DSS40	6
SK29287-031	SK29287-032	SK29287-033	SK29287-034	SK29287-035	EATON 520/521	7

NOTE: REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE

NOTES:

- 1) USE WITH MERITOR 40145/44145 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-001

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	14.5	14.0-15.0
0.1	14.4	13.9-14.9
0.2	14.3	13.8-14.8
0.3	14.2	13.7-14.7
0.4	14.1	13.6-14.6
0.5	14.0	13.5-14.5
0.6	13.9	13.4-14.4
0.7	13.9	13.4-14.4
0.8	13.8	13.3-14.3
0.9	13.7	13.2-14.2
1.0	13.6	13.1-14.1
1.1	13.5	13.0-14.0
1.2	13.4	12.9-13.9
1.3	13.4	12.9-13.9
1.4	13.3	12.8-13.8
1.5	13.2	12.7-13.7
1.6	13.1	12.6-13.6
1.7	13.1	12.6-13.6
1.8	13.0	12.5-13.5
1.9	12.9	12.4-13.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.8	12.3-13.3
2.1	12.7	12.2-13.2
2.2	12.6	12.1-13.1
2.3	12.5	12.0-13.0
2.4	12.5	12.0-13.0
2.5	12.4	11.9-12.9
2.6	12.3	11.8-12.8
2.7	12.2	11.7-12.7
2.8	12.1	11.6-12.6
2.9	12.0	11.5-12.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	12.0	11.5-12.5
3.1	11.9	11.4-12.4
3.2	11.8	11.3-12.3
3.3	11.7	11.2-12.2
3.4	11.6	11.1-12.1
3.5	11.5	11.0-12.0
3.6	11.5	11.0-12.0
3.7	11.4	10.9-11.9
3.8	11.3	10.8-11.8
3.9	11.2	10.7-11.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	11.1	10.6-11.6
4.1	11.0	10.5-11.5
4.2	11.0	10.5-11.5
4.3	10.9	10.4-11.4
4.4	10.8	10.3-11.3
4.5	10.7	10.2-11.2
4.6	10.6	10.1-11.1
4.7	10.5	10.0-11.0
4.8	10.5	10.0-11.0
4.9	10.4	9.9-10.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	10.3	9.8-10.8
5.1	10.2	9.7-10.7
5.2	10.1	9.6-10.6
5.3	10.0	9.5-10.5
5.4	10.0	9.5-10.5
5.5	9.9	9.4-10.4
5.6	9.8	9.3-10.3
5.7	9.7	9.2-10.2
5.8	9.6	9.1-10.1
5.9	9.6	9.1-10.1
6.0	9.5	9.0-10.0



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH MERITOR 40145/44145 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-002

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	14.0	13.5-14.5
0.1	13.9	13.4-14.4
0.2	13.8	13.3-14.3
0.3	13.7	13.2-14.2
0.4	13.6	13.1-14.1
0.5	13.5	13.0-14.0
0.6	13.4	12.9-13.9
0.7	13.4	12.9-13.9
0.8	13.3	12.8-13.8
0.9	13.2	12.7-13.7
1.0	13.1	12.6-13.6
1.1	13.0	12.5-13.5
1.2	12.9	12.4-13.4
1.3	12.9	12.4-13.4
1.4	12.8	12.3-13.3
1.5	12.7	12.2-13.2
1.6	12.6	12.1-13.1
1.7	12.5	12.0-13.0
1.8	12.4	11.9-12.9
1.9	12.4	11.9-12.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.3	11.8-12.8
2.1	12.2	11.7-12.7
2.2	12.1	11.6-12.6
2.3	12.1	11.6-12.6
2.4	12.0	11.5-12.5
2.5	11.9	11.4-12.4
2.6	11.8	11.3-12.3
2.7	11.7	11.2-12.2
2.8	11.6	11.1-12.1
2.9	11.6	11.1-12.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.5	11.0-12.0
3.1	11.4	10.9-11.9
3.2	11.3	10.8-11.8
3.3	11.2	10.7-11.7
3.4	11.1	10.6-11.6
3.5	11.1	10.6-11.6
3.6	11.0	10.5-11.5
3.7	10.9	10.4-11.4
3.8	10.8	10.3-11.3
3.9	10.7	10.2-11.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.6	10.1-11.1
4.1	10.6	10.1-11.1
4.2	10.5	10.0-11.0
4.3	10.4	9.9-10.9
4.4	10.3	9.8-10.8
4.5	10.2	9.7-10.7
4.6	10.1	9.6-10.6
4.7	10.0	9.5-10.5
4.8	9.9	9.4-10.4
4.9	9.8	9.3-10.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.8	9.3-10.3
5.1	9.7	9.2-10.2
5.2	9.6	9.1-10.1
5.3	9.5	9.0-10.0
5.4	9.4	8.9-9.9
5.5	9.3	8.8-9.8
5.6	9.3	8.8-9.8
5.7	9.2	8.7-9.7
5.8	9.1	8.6-9.6
5.9	9.0	8.5-9.5
6.0	8.9	8.4-9.4



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH MERITOR 40160/46160/46164/50160 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-006

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.9	13.4-14.4
0.1	13.8	13.3-14.3
0.2	13.8	13.3-14.3
0.3	13.7	13.2-14.2
0.4	13.6	13.1-14.1
0.5	13.5	13.0-14.0
0.6	13.5	13.0-14.0
0.7	13.4	12.9-13.9
0.8	13.3	12.8-13.8
0.9	13.3	12.8-13.8
1.0	13.2	12.7-13.7
1.1	13.1	12.6-13.6
1.2	13.0	12.5-13.5
1.3	13.0	12.5-13.5
1.4	12.9	12.4-13.4
1.5	12.8	12.3-13.3
1.6	12.7	12.2-13.2
1.7	12.6	12.1-13.1
1.8	12.5	12.0-13.0
1.9	12.4	11.9-12.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.4	11.9-12.9
2.1	12.3	11.8-12.8
2.2	12.2	11.7-12.7
2.3	12.1	11.6-12.6
2.4	12.1	11.6-12.6
2.5	12.0	11.5-12.5
2.6	11.9	11.4-12.4
2.7	11.9	11.4-12.4
2.8	11.8	11.3-12.3
2.9	11.7	11.2-12.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.6	11.1-12.1
3.1	11.6	11.1-12.1
3.2	11.5	11.0-12.0
3.3	11.4	10.9-11.9
3.4	11.3	10.8-11.8
3.5	11.2	10.7-11.7
3.6	11.1	10.6-11.6
3.7	11.0	10.5-11.5
3.8	11.0	10.5-11.5
3.9	10.9	10.4-11.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.8	10.3-11.3
4.1	10.8	10.3-11.3
4.2	10.7	10.2-11.2
4.3	10.6	10.1-11.1
4.4	10.5	10.0-11.0
4.5	10.4	9.9-10.9
4.6	10.3	9.8-10.8
4.7	10.2	9.7-10.7
4.8	10.2	9.7-10.7
4.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	10.0	9.5-10.5
5.1	9.9	9.4-10.4
5.2	9.9	9.4-10.4
5.3	9.8	9.3-10.3
5.4	9.7	9.2-10.2
5.5	9.7	9.2-10.2
5.6	9.6	9.1-10.1
5.7	9.5	9.0-10.0
5.8	9.4	8.9-9.9
5.9	9.3	8.8-9.8
6.0	9.2	8.7-9.7



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

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REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-007

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.5	13.0-14.0
0.1	13.4	12.9-13.9
0.2	13.3	12.8-13.8
0.3	13.2	12.7-13.7
0.4	13.2	12.7-13.7
0.5	13.1	12.6-13.6
0.6	13.0	12.5-13.5
0.7	13.0	12.5-13.5
0.8	12.9	12.4-13.4
0.9	12.8	12.3-13.3
1.0	12.7	12.2-13.2
1.1	12.6	12.1-13.1
1.2	12.5	12.0-12.5
1.3	12.4	11.9-12.9
1.4	12.4	11.9-12.9
1.5	12.3	11.8-12.8
1.6	12.2	11.7-12.7
1.7	12.2	11.7-12.7
1.8	12.1	11.6-12.6
1.9	12.0	11.5-12.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.9	11.4-12.4
2.1	11.9	11.4-12.4
2.2	11.8	11.3-12.3
2.3	11.7	11.2-12.2
2.4	11.6	11.1-12.1
2.5	11.5	11.0-12.0
2.6	11.4	10.9-11.9
2.7	11.3	10.8-11.8
2.8	11.3	10.8-11.8
2.9	11.2	10.7-11.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.1	10.6-11.6
3.1	11.1	10.6-11.6
3.2	11.0	10.5-11.5
3.3	10.9	10.4-11.4
3.4	10.8	10.3-11.2
3.5	10.7	10.2-11.2
3.6	10.6	10.1-11.1
3.7	10.5	10.0-11.0
3.8	10.5	10.0-11.0
3.9	10.4	9.9-10.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.3	9.8-10.8
4.1	10.3	9.8-10.8
4.2	10.2	9.7-10.7
4.3	10.1	9.6-10.6
4.4	10.0	9.5-10.5
4.5	9.9	9.4-10.4
4.6	9.8	9.3-10.3
4.7	9.7	9.2-10.2
4.8	9.7	9.2-10.2
4.9	9.6	9.1-10.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.5	9.0-10.0
5.1	9.5	9.0-10.0
5.2	9.4	8.9-9.9
5.3	9.3	8.8-9.8
5.4	9.2	8.7-9.7
5.5	9.1	8.6-9.6
5.6	9.0	8.5-9.5
5.7	8.9	8.4-9.4
5.8	8.9	8.4-9.4
5.9	8.8	9.3-9.3
6.0	8.7	8.2-9.2



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH MERITOR 40160/46160/46164/50160 AXLES, AND 60" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-009

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.3	11.8-12.8
0.1	12.2	11.7-12.7
0.2	12.1	11.6-12.6
0.3	12.0	11.5-12.5
0.4	11.9	11.4-12.4
0.5	11.8	11.3-12.3
0.6	11.8	11.3-12.3
0.7	11.7	11.2-12.2
0.8	11.6	11.1-12.1
0.9	11.6	11.1-12.1
1.0	11.5	11.0-12.0
1.1	11.4	10.9-11.9
1.2	11.3	10.8-11.8
1.3	11.2	10.7-11.7
1.4	11.1	10.6-11.6
1.5	11.0	10.5-11.5
1.6	11.0	10.5-11.5
1.7	10.9	10.4-11.4
1.8	10.8	10.3-11.3
1.9	10.7	10.2-11.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.6	10.1-11.1
2.1	10.5	10.0-11.0
2.2	10.5	10.0-11.0
2.3	10.4	9.9-10.9
2.4	10.3	9.8-10.8
2.5	10.3	9.8-10.8
2.6	10.2	9.7-10.7
2.7	10.1	9.6-10.6
2.8	10.0	9.5-10.5
2.9	9.9	9.4-10.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.8	9.3-10.3
3.1	9.7	9.2-10.2
3.2	9.7	9.2-10.2
3.3	9.6	9.1-10.1
3.4	9.5	9.0-10.0
3.5	9.4	8.9-9.9
3.6	9.3	8.8-9.8
3.7	9.2	8.7-9.7
3.8	9.2	8.7-9.7
3.9	9.1	8.6-9.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.0	8.5-9.5
4.1	9.0	8.5-9.5
4.2	8.9	8.4-9.4
4.3	8.8	8.3-9.3
4.4	8.7	8.2-9.2
4.5	8.6	8.1-9.1
4.6	8.5	8.0-9.0
4.7	8.5	8.0-9.0
4.8	8.4	7.9-8.9
4.9	8.3	7.8-8.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.2	7.7-8.7
5.1	8.1	7.6-8.6
5.2	8.0	7.5-8.5
5.3	7.9	7.4-8.4
5.4	7.9	7.4-8.4
5.5	7.8	7.3-8.3
5.6	7.7	7.2-8.2
5.7	7.6	7.1-8.1
5.8	7.5	7.0-8.0
5.9	7.4	6.9-7.9
6.0	7.4	6.9-7.9



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH MERITOR 52180/52185/58180/58185 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-011

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	14.4	13.9-14.9
0.1	14.3	13.8-14.8
0.2	14.2	13.7-14.7
0.3	14.2	13.7-14.7
0.4	14.1	13.6-14.6
0.5	14.0	13.5-14.5
0.6	14.0	13.5-14.5
0.7	13.9	13.4-14.4
0.8	13.8	13.3-14.3
0.9	13.7	13.2-14.2
1.0	13.7	13.2-14.2
1.1	13.6	13.1-14.1
1.2	13.5	13.0-14.0
1.3	13.5	13.0-14.0
1.4	13.4	12.9-13.9
1.5	13.3	12.8-13.8
1.6	13.2	12.7-13.7
1.7	13.2	12.7-13.7
1.8	13.1	12.6-13.6
1.9	13.0	12.5-13.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.9	12.4-13.4
2.1	12.9	12.4-13.4
2.2	12.8	12.3-13.3
2.3	12.7	12.2-13.2
2.4	12.6	12.1-13.1
2.5	12.5	12.0-13.0
2.6	12.4	11.9-12.9
2.7	12.3	11.8-12.8
2.8	12.3	11.8-12.8
2.9	12.2	11.7-12.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	12.1	11.6-12.6
3.1	12.0	11.5-12.5
3.2	12.0	11.5-12.5
3.3	11.9	11.4-12.4
3.4	11.8	11.3-12.3
3.5	11.8	11.3-12.3
3.6	11.7	11.2-12.2
3.7	11.6	11.1-12.1
3.8	11.5	11.0-12.0
3.9	11.5	11.0-12.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	11.4	10.9-11.9
4.1	11.3	10.8-11.8
4.2	11.2	10.7-11.7
4.3	11.1	10.6-11.6
4.4	11.0	10.5-11.5
4.5	10.9	10.4-11.4
4.6	10.9	10.4-11.4
4.7	10.8	10.3-11.3
4.8	10.7	10.2-11.2
4.9	10.6	10.1-11.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	10.6	10.1-11.1
5.1	10.5	10.0-11.0
5.2	10.4	9.9-10.9
5.3	10.4	9.9-10.9
5.4	10.3	9.8-10.8
5.5	10.2	9.7-10.7
5.6	10.1	9.6-10.6
5.7	10.0	9.5-10.5
5.8	9.9	9.4-10.4
5.9	9.8	9.3-10.3
6.0	9.8	9.3-10.3



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH MERITOR 52180/52185/58180/58185 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-012

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	14.0	13.5-14.5
0.1	13.9	13.4-14.4
0.2	13.8	13.3-14.3
0.3	13.8	13.3-14.3
0.4	13.7	13.2-14.2
0.5	13.6	13.1-14.1
0.6	13.5	13.0-14.0
0.7	13.4	12.9-13.9
0.8	13.3	12.8-13.8
0.9	13.2	12.7-13.7
1.0	13.2	12.7-13.7
1.1	13.1	12.6-13.6
1.2	13.0	12.5-13.5
1.3	12.9	12.4-13.4
1.4	12.9	12.4-13.4
1.5	12.8	12.3-13.3
1.6	12.7	12.2-13.2
1.7	12.7	12.2-13.2
1.8	12.6	12.1-13.1
1.9	12.5	12.0-13.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.4	11.9-12.9
2.1	12.4	11.9-12.9
2.2	12.3	11.8-12.8
2.3	12.2	11.7-12.7
2.4	12.1	11.6-12.6
2.5	12.0	11.5-12.5
2.6	11.9	11.4-12.4
2.7	11.8	11.3-12.3
2.8	11.8	11.3-12.3
2.9	11.7	11.2-12.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.6	11.1-12.1
3.1	11.5	11.0-12.0
3.2	11.5	11.0-12.0
3.3	11.4	10.9-11.9
3.4	11.3	10.8-11.8
3.5	11.3	10.8-11.8
3.6	11.2	10.7-11.7
3.7	11.1	10.6-11.6
3.8	11.0	10.5-11.5
3.9	10.9	10.4-11.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.8	10.3-11.3
4.1	10.7	10.2-11.2
4.2	10.7	10.2-11.2
4.3	10.6	10.1-11.1
4.4	10.5	10.0-11.0
4.5	10.5	10.0-11.0
4.6	10.4	9.9-10.9
4.7	10.3	9.8-10.8
4.8	10.2	9.7-10.7
4.9	10.2	9.7-10.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	10.1	9.6-10.6
5.1	10.0	9.5-10.5
5.2	9.9	9.4-10.4
5.3	9.8	9.3-10.3
5.4	9.7	9.2-10.2
5.5	9.6	9.1-10.1
5.6	9.6	9.1-10.1
5.7	9.5	9.0-10.0
5.8	9.4	8.9-9.9
5.9	9.4	8.9-9.9
6.0	9.3	8.8-9.8



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 402/403/451 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-016

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.9	11.4-12.4
0.1	11.8	11.3-12.3
0.2	11.8	11.3-12.3
0.3	11.7	11.2-12.2
0.4	11.6	11.1-12.1
0.5	11.5	11.0-12.0
0.6	11.5	11.0-12.0
0.7	11.4	10.9-11.9
0.8	11.3	10.8-11.8
0.9	11.2	10.7-11.7
1.0	11.2	10.7-11.7
1.1	11.1	10.6-11.6
1.2	11.0	10.5-11.5
1.3	10.9	10.4-11.4
1.4	10.9	10.4-11.4
1.5	10.8	10.3-11.3
1.6	10.7	10.2-11.2
1.7	10.7	10.2-11.2
1.8	10.6	10.1-11.1
1.9	10.5	10.0-11.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.4	9.9-10.9
2.1	10.4	9.9-10.9
2.2	10.3	9.8-10.8
2.3	10.2	9.7-10.7
2.4	10.1	9.6-10.6
2.5	10.0	9.5-10.5
2.6	9.9	9.4-10.4
2.7	9.8	9.3-10.3
2.8	9.8	9.3-10.3
2.9	9.7	9.2-10.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.6	9.1-10.1
3.1	9.5	9.0-10.0
3.2	9.5	9.0-10.0
3.3	9.4	8.9-9.9
3.4	9.3	8.8-9.8
3.5	9.2	8.7-9.7
3.6	9.2	8.7-9.7
3.7	9.1	8.6-9.6
3.8	9.0	8.5-9.5
3.9	9.0	8.5-9.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.9	8.4-9.4
4.1	8.8	8.3-9.3
4.2	8.7	8.2-9.2
4.3	8.7	8.2-9.2
4.4	8.6	8.1-9.1
4.5	8.5	8.0-9.0
4.6	8.4	7.9-8.9
4.7	8.3	7.8-8.8
4.8	8.2	7.7-8.7
4.9	8.1	7.6-8.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.1	7.6-8.6
5.1	8.0	7.5-8.5
5.2	7.9	7.4-8.4
5.3	7.8	7.3-8.3
5.4	7.8	7.3-8.3
5.5	7.7	7.2-8.2
5.6	7.6	7.1-8.1
5.7	7.6	7.1-8.1
5.8	7.5	7.0-8.0
5.9	7.4	6.9-7.9
6.0	7.3	6.8-7.8



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 402/403/451 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-017

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.6	11.1-12.1
0.1	11.5	11.0-12.0
0.2	11.4	10.9-11.9
0.3	11.3	10.8-11.8
0.4	11.2	10.7-11.7
0.5	11.1	10.6-11.6
0.6	11.1	10.6-11.6
0.7	11.0	10.5-11.5
0.8	10.9	10.4-11.4
0.9	10.8	10.3-11.3
1.0	10.8	10.3-11.3
1.1	10.7	10.2-11.2
1.2	10.6	10.1-11.1
1.3	10.6	10.1-11.1
1.4	10.5	10.0-11.0
1.5	10.4	9.9-10.9
1.6	10.3	9.8-10.8
1.7	10.3	9.8-10.8
1.8	10.2	9.7-10.7
1.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.0	9.5-10.5
2.1	9.9	9.4-10.4
2.2	9.8	9.3-10.3
2.3	9.7	9.2-10.2
2.4	9.7	9.2-10.2
2.5	9.6	9.1-10.1
2.6	9.5	9.0-10.0
2.7	9.4	8.9-9.9
2.8	9.4	8.9-9.9
2.9	9.3	8.8-9.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.2	8.7-9.7
3.1	9.2	8.7-9.7
3.2	9.1	8.6-9.6
3.3	9.0	8.5-9.5
3.4	8.9	8.4-9.4
3.5	8.9	8.4-9.4
3.6	8.8	8.3-9.3
3.7	8.7	8.2-9.2
3.8	8.6	8.1-9.1
3.9	8.5	8.0-9.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.4	7.9-8.9
4.1	8.3	7.8-8.8
4.2	8.2	7.7-8.7
4.3	8.2	7.7-8.7
4.4	8.1	7.6-8.6
4.5	8.0	7.5-8.5
4.6	8.0	7.5-8.5
4.7	7.9	7.4-8.4
4.8	7.8	7.3-8.3
4.9	7.8	7.3-8.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	7.7	7.2-8.2
5.1	7.6	7.1-8.1
5.2	7.5	7.0-8.0
5.3	7.4	6.9-7.9
5.4	7.3	6.8-7.8
5.5	7.2	6.7-7.7
5.6	7.2	6.7-7.7
5.7	7.1	6.6-7.6
5.8	7.0	6.5-7.5
5.9	7.0	6.5-7.5
6.0	6.9	6.4-7.4



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 404/405/454/DSH40/DSH44 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-021

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.9	12.4-13.4
0.1	12.8	12.3-13.3
0.2	12.7	12.2-13.2
0.3	12.6	12.1-13.1
0.4	12.6	12.1-13.1
0.5	12.5	12.0-13.0
0.6	12.4	11.9-12.9
0.7	12.4	11.9-12.9
0.8	12.3	11.8-12.8
0.9	12.2	11.7-12.7
1.0	12.1	11.6-12.6
1.1	12.0	11.5-12.5
1.2	11.9	11.4-12.4
1.3	11.8	11.3-12.3
1.4	11.8	11.3-12.3
1.5	11.7	11.2-12.2
1.6	11.6	11.1-12.1
1.7	11.5	11.0-12.0
1.8	11.4	10.9-11.9
1.9	11.3	10.8-11.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.3	10.8-11.8
2.1	11.2	10.7-11.7
2.2	11.1	10.6-11.6
2.3	11.1	10.6-11.6
2.4	11.0	10.5-11.5
2.5	10.9	10.4-11.4
2.6	10.8	10.3-11.3
2.7	10.7	10.2-11.2
2.8	10.6	10.1-11.1
2.9	10.5	10.0-11.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.5	10.0-11.0
3.1	10.4	9.9-10.9
3.2	10.3	9.8-10.8
3.3	10.3	9.8-10.8
3.4	10.2	9.7-10.7
3.5	10.1	9.6-10.6
3.6	10.0	9.5-10.5
3.7	9.9	9.4-10.4
3.8	9.8	9.3-10.3
3.9	9.7	9.2-10.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.7	9.2-10.2
4.1	9.6	9.1-10.1
4.2	9.5	9.0-10.0
4.3	9.4	8.9-9.9
4.4	9.3	8.8-9.8
4.5	9.2	8.7-9.7
4.6	9.2	8.7-9.7
4.7	9.1	8.6-9.6
4.8	9.0	8.5-9.5
4.9	9.0	8.5-9.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.9	8.4-9.4
5.1	8.8	8.3-9.3
5.2	8.7	8.2-9.2
5.3	8.6	8.1-9.1
5.4	8.5	8.0-9.0
5.5	8.4	7.9-8.9
5.6	8.4	7.9-8.9
5.7	8.3	7.8-8.8
5.8	8.2	7.7-8.7
5.9	8.1	7.6-8.6
6.0	8.0	7.5-8.5



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 404/405/454/DSH40/DSH44 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-022

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.5	12.0-13.0
0.1	12.4	11.9-12.9
0.2	12.3	11.8-12.8
0.3	12.2	11.7-12.7
0.4	12.1	11.6-12.6
0.5	12.0	11.5-12.5
0.6	12.0	11.5-12.5
0.7	11.9	11.4-12.4
0.8	11.8	11.3-12.3
0.9	11.8	11.3-12.3
1.0	11.7	11.2-12.2
1.1	11.6	11.1-12.1
1.2	11.5	11.0-12.0
1.3	11.4	10.9-11.9
1.4	11.3	10.8-11.8
1.5	11.3	10.8-11.8
1.6	11.2	10.7-11.7
1.7	11.1	10.6-11.6
1.8	11.0	10.5-11.5
1.9	10.9	10.4-11.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.8	10.3-11.3
2.1	10.7	10.2-11.2
2.2	10.7	10.2-11.2
2.3	10.6	10.1-11.1
2.4	10.5	10.0-11.0
2.5	10.5	10.0-11.0
2.6	10.4	9.9-10.9
2.7	10.3	9.8-10.8
2.8	10.2	9.7-10.7
2.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.0	9.5-10.5
3.1	10.0	9.5-10.5
3.2	9.9	9.4-10.4
3.3	9.8	9.3-10.3
3.4	9.7	9.2-10.2
3.5	9.6	9.1-10.1
3.6	9.5	9.0-10.0
3.7	9.4	8.9-9.9
3.8	9.4	8.9-9.9
3.9	9.3	8.8-9.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.2	8.7-9.7
4.1	9.1	8.6-9.6
4.2	9.0	8.5-9.5
4.3	8.9	8.4-9.4
4.4	8.9	8.4-9.4
4.5	8.8	8.3-9.3
4.6	8.7	8.2-9.2
4.7	8.7	8.2-9.2
4.8	8.6	8.1-9.1
4.9	8.5	8.0-9.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.4	7.9-8.9
5.1	8.3	7.8-8.8
5.2	8.2	7.7-8.7
5.3	8.2	7.7-8.7
5.4	8.1	7.6-8.6
5.5	8.0	7.5-8.5
5.6	7.9	7.4-8.4
5.7	7.8	7.3-8.3
5.8	7.7	7.2-8.2
5.9	7.6	7.1-8.1
6.0	7.6	7.1-8.1



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 404/405/454/DSH40/DSH44 AXLES, AND 60" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-024

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.3	10.8-11.8
0.1	11.2	10.7-11.7
0.2	11.2	10.7-11.7
0.3	11.1	10.6-11.6
0.4	11.0	10.5-11.5
0.5	10.9	10.4-11.4
0.6	10.8	10.3-11.3
0.7	10.8	10.3-11.3
0.8	10.7	10.2-11.2
0.9	10.6	10.1-11.1
1.0	10.5	10.0-11.0
1.1	10.4	9.9-10.9
1.2	10.3	9.8-10.8
1.3	10.3	9.8-10.8
1.4	10.2	9.7-10.7
1.5	10.1	9.6-10.6
1.6	10.0	9.5-10.5
1.7	9.9	9.4-10.4
1.8	9.8	9.3-10.3
1.9	9.8	9.3-10.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	9.7	9.2-10.2
2.1	9.6	9.1-10.1
2.2	9.5	9.0-10.0
2.3	9.4	8.9-9.9
2.4	9.3	8.8-9.8
2.5	9.3	8.8-9.8
2.6	9.2	8.7-9.7
2.7	9.1	8.6-9.6
2.8	9.0	8.5-9.5
2.9	8.9	8.4-9.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	8.8	8.3-9.3
3.1	8.8	8.3-9.3
3.2	8.7	8.2-9.2
3.3	8.6	8.1-9.1
3.4	8.5	8.0-9.0
3.5	8.4	7.9-8.9
3.6	8.3	7.8-8.8
3.7	8.3	7.8-8.8
3.8	8.2	7.7-8.7
3.9	8.1	7.6-8.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.0	7.5-8.5
4.1	7.9	7.4-8.4
4.2	7.8	7.3-8.3
4.3	7.8	7.3-8.3
4.4	7.7	7.2-8.2
4.5	7.6	7.1-8.1
4.6	7.5	7.0-8.0
4.7	7.4	6.9-7.9
4.8	7.3	6.8-7.8
4.9	7.3	6.8-7.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	7.2	6.7-7.6
5.1	7.1	6.6-7.6
5.2	7.0	6.5-7.5
5.3	6.9	6.4-7.4
5.4	6.8	6.3-7.3
5.5	6.8	6.3-7.3
5.6	6.7	6.2-7.2
5.7	6.6	6.1-7.1
5.8	6.5	6.0-7.0
5.9	6.4	5.9-6.9
6.0	6.3	5.8-6.8



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 460/461/462/463/DSS40 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-026

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.4	12.9-13.9
0.1	13.3	12.8-13.8
0.2	13.3	12.8-13.8
0.3	13.2	12.7-13.7
0.4	13.1	12.6-13.6
0.5	13.1	12.6-13.6
0.6	13.0	12.5-13.5
0.7	12.9	12.4-13.4
0.8	12.8	12.3-13.3
0.9	12.7	12.2-13.2
1.0	12.6	12.1-13.1
1.1	12.5	12.0-13.0
1.2	12.5	12.0-13.0
1.3	12.4	11.9-12.9
1.4	12.3	11.8-12.8
1.5	12.3	11.8-12.8
1.6	12.2	11.7-12.7
1.7	12.1	11.6-12.6
1.8	12.0	11.5-12.5
1.9	11.9	11.4-12.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.8	11.3-12.3
2.1	11.7	11.2-12.2
2.2	11.7	11.2-12.2
2.3	11.6	11.1-12.1
2.4	11.5	11.0-12.0
2.5	11.5	11.0-12.0
2.6	11.4	10.9-11.9
2.7	11.3	10.8-11.8
2.8	11.2	10.7-11.7
2.9	11.1	10.6-11.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.0	10.5-11.5
3.1	10.9	10.4-11.4
3.2	10.9	10.4-11.4
3.3	10.8	10.3-11.3
3.4	10.7	10.2-11.2
3.5	10.7	10.2-11.2
3.6	10.6	10.1-11.1
3.7	10.5	10.0-11.0
3.8	10.4	9.9-10.9
3.9	10.3	9.8-10.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.2	9.7-10.7
4.1	10.1	9.6-10.6
4.2	10.1	9.6-10.6
4.3	10.0	9.5-10.5
4.4	9.9	9.4-10.4
4.5	9.9	9.4-10.4
4.6	9.8	9.3-10.3
4.7	9.7	9.2-10.2
4.8	9.6	9.1-10.1
4.9	9.5	9.0-10.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.4	8.9-9.9
5.1	9.3	8.8-9.8
5.2	9.3	8.8-9.8
5.3	9.2	8.7-9.7
5.4	9.1	8.6-9.6
5.5	9.1	8.6-9.6
5.6	9.0	8.5-9.5
5.7	8.9	8.4-9.4
5.8	8.8	8.3-9.3
5.9	8.7	8.2-9.2
6.0	8.6	8.1-9.1



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 460/461/462/463/DSS40 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-027

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.0	12.5-13.5
0.1	12.9	12.4-13.4
0.2	12.8	12.3-13.3
0.3	12.7	12.2-13.2
0.4	12.7	12.2-13.2
0.5	12.6	12.1-13.1
0.6	12.5	12.0-13.0
0.7	12.4	11.9-12.9
0.8	12.3	11.8-12.8
0.9	12.2	11.7-12.7
1.0	12.2	11.7-12.7
1.1	12.1	11.6-12.6
1.2	12.0	11.5-12.5
1.3	12.0	11.5-12.5
1.4	11.9	11.4-12.4
1.5	11.8	11.3-12.3
1.6	11.7	11.2-12.2
1.7	11.6	11.1-12.1
1.8	11.5	11.0-12.0
1.9	11.4	10.9-11.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.4	10.9-11.9
2.1	11.3	10.8-11.8
2.2	11.2	10.7-11.7
2.3	11.2	10.7-11.7
2.4	11.1	10.6-11.6
2.5	11.0	10.5-11.5
2.6	10.9	10.4-11.4
2.7	10.8	10.3-11.3
2.8	10.7	10.2-11.2
2.9	10.6	10.1-11.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.6	10.1-11.1
3.1	10.5	10.0-11.0
3.2	10.4	9.9-10.9
3.3	10.4	9.9-10.9
3.4	10.3	9.8-10.8
3.5	10.2	9.7-10.7
3.6	10.1	9.6-10.6
3.7	10.0	9.5-10.5
3.8	9.9	9.4-10.4
3.9	9.9	9.4-10.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.8	9.3-10.3
4.1	9.7	9.2-10.2
4.2	9.6	9.1-10.1
4.3	9.5	9.0-10.0
4.4	9.4	8.9-9.9
4.5	9.3	8.8-9.8
4.6	9.3	8.8-9.8
4.7	9.2	8.7-9.7
4.8	9.1	8.6-9.6
4.9	9.0	8.5-9.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.9	8.4-9.4
5.1	8.8	8.3-9.3
5.2	8.8	8.3-9.3
5.3	8.7	8.2-9.2
5.4	8.6	8.1-9.1
5.5	8.6	8.1-9.1
5.6	8.5	8.0-9.0
5.7	8.4	7.9-8.9
5.8	8.3	7.8-8.8
5.9	8.2	7.7-8.7
6.0	8.1	7.6-8.6

i NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 460/461/462/463/DSS40 AXLES, AND 56" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-028

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.6	12.1-13.1
0.1	12.5	12.0-13.0
0.2	12.4	11.9-12.9
0.3	12.3	11.8-12.8
0.4	12.2	11.7-12.7
0.5	12.2	11.7-12.7
0.6	12.1	11.6-12.6
0.7	12.0	11.5-12.5
0.8	11.9	11.4-12.4
0.9	11.9	11.4-12.4
1.0	11.8	11.3-12.3
1.1	11.7	11.2-12.2
1.2	11.6	11.1-12.1
1.3	11.5	11.0-12.0
1.4	11.4	10.9-11.9
1.5	11.4	10.9-11.9
1.6	11.3	10.8-11.8
1.7	11.2	10.7-11.7
1.8	11.1	10.6-11.6
1.9	11.0	10.5-11.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.9	10.4-11.4
2.1	10.9	10.4-11.4
2.2	10.8	10.3-11.3
2.3	10.7	10.2-11.2
2.4	10.6	10.1-11.1
2.5	10.6	10.1-11.1
2.6	10.5	10.0-11.0
2.7	10.4	9.9-10.9
2.8	10.3	9.8-10.8
2.9	10.2	9.7-10.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.1	9.6-10.6
3.1	10.1	9.6-10.6
3.2	10.0	9.5-10.5
3.3	9.9	9.4-10.4
3.4	9.8	9.3-10.3
3.5	9.7	9.2-10.2
3.6	9.6	9.1-10.1
3.7	9.6	9.1-10.1
3.8	9.5	9.0-10.0
3.9	9.4	8.9-9.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.3	8.8-9.8
4.1	9.2	8.7-9.7
4.2	9.1	8.6-9.6
4.3	9.1	8.6-9.6
4.4	9.0	8.5-9.5
4.5	8.9	8.4-9.4
4.6	8.8	8.3-9.3
4.7	8.8	8.3-9.3
4.8	8.7	8.2-9.2
4.9	8.6	8.1-9.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.5	8.0-9.0
5.1	8.4	7.9-8.9
5.2	8.3	7.8-8.8
5.3	8.3	7.8-8.8
5.4	8.2	7.7-8.7
5.5	8.1	7.6-8.6
5.6	8.0	7.5-8.5
5.7	7.9	7.4-8.4
5.8	7.8	7.3-8.3
5.9	7.8	7.3-8.3
6.0	7.7	7.2-8.2



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 460/461/462/463/DSS40 AXLES, AND 60" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-029

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.8	11.3-12.3
0.1	11.7	11.2-12.2
0.2	11.6	11.1-12.1
0.3	11.5	11.0-12.0
0.4	11.5	11.0-12.0
0.5	11.4	10.9-11.9
0.6	11.3	10.8-11.8
0.7	11.2	10.7-11.7
0.8	11.1	10.6-11.6
0.9	11.0	10.5-11.5
1.0	11.0	10.5-11.5
1.1	10.9	10.4-11.4
1.2	10.8	10.3-11.3
1.3	10.8	10.3-11.3
1.4	10.7	10.2-11.2
1.5	10.6	10.1-11.1
1.6	10.5	10.0-11.0
1.7	10.4	9.9-10.9
1.8	10.3	9.8-10.8
1.9	10.3	9.8-10.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.2	9.7-10.7
2.1	10.1	9.6-10.6
2.2	10.0	9.5-10.5
2.3	9.9	9.4-10.4
2.4	9.8	9.3-10.3
2.5	9.8	9.3-10.3
2.6	9.7	9.2-10.2
2.7	9.6	9.1-10.1
2.8	9.5	9.0-10.0
2.9	9.4	8.9-9.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.3	8.8-9.8
3.1	9.3	8.8-9.8
3.2	9.2	8.7-9.7
3.3	9.1	8.6-9.6
3.4	9.0	8.5-9.5
3.5	8.9	8.4-9.4
3.6	8.8	8.3-9.3
3.7	8.8	8.3-9.3
3.8	8.7	8.2-9.2
3.9	8.6	8.1-9.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.5	8.0-9.0
4.1	8.4	7.9-8.9
4.2	8.3	7.8-8.8
4.3	8.3	7.8-8.8
4.4	8.2	7.7-8.7
4.5	8.1	7.6-8.6
4.6	8.0	7.5-8.5
4.7	7.9	7.4-8.4
4.8	7.8	7.3-8.3
4.9	7.8	7.3-8.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	7.7	7.2-8.2
5.1	7.6	7.1-8.1
5.2	7.5	7.0-8.0
5.3	7.4	6.9-7.9
5.4	7.3	6.8-7.8
5.5	7.3	6.8-7.8
5.6	7.2	6.7-7.7
5.7	7.1	6.6-7.6
5.8	7.0	6.5-7.5
5.9	6.9	6.4-7.4
6.0	6.8	6.3-7.3



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 460/461/462/463/DSS40 AXLES, AND 72" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-030

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	10.0	9.5-10.5
0.1	9.9	9.4-10.4
0.2	9.8	9.3-10.3
0.3	9.7	9.2-10.2
0.4	9.6	9.1-10.1
0.5	9.5	9.0-10.0
0.6	9.5	9.0-10.0
0.7	9.4	8.9-9.9
0.8	9.3	8.8-9.9
0.9	9.2	8.7-9.7
1.0	9.1	8.6-9.6
1.1	9.1	8.6-9.6
1.2	9.0	8.5-9.5
1.3	8.9	8.4-9.4
1.4	8.8	8.3-9.3
1.5	8.7	8.2-9.2
1.6	8.6	8.1-9.1
1.7	8.5	8.0-9.0
1.8	8.4	7.9-8.9
1.9	8.3	7.8-8.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	8.3	7.8-8.8
2.1	8.2	7.7-8.7
2.2	8.1	7.6-8.6
2.3	8.0	7.5-8.5
2.4	7.9	7.4-8.4
2.5	7.9	7.4-8.4
2.6	7.8	7.3-8.3
2.7	7.7	7.2-8.2
2.8	7.6	7.1-8.1
2.9	7.5	7.0-8.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	7.4	6.9-7.9
3.1	7.3	6.8-7.8
3.2	7.2	6.7-7.7
3.3	7.1	6.6-7.6
3.4	7.1	6.6-7.6
3.5	7.0	6.5-7.5
3.6	6.9	6.4-7.4
3.7	6.8	6.3-7.3
3.8	6.7	6.2-7.2
3.9	6.7	6.2-7.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	6.6	6.1-7.1
4.1	6.5	6.0-7.0
4.2	6.4	5.9-6.9
4.3	6.3	5.8-6.8
4.4	6.2	5.7-6.7
4.5	6.1	5.6-6.6
4.6	6.0	5.5-6.5
4.7	5.9	5.4-6.4
4.8	5.9	5.4-6.4
4.9	5.8	5.3-6.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	5.7	5.2-6.2
5.1	5.6	5.1-6.1
5.2	5.5	5.0-6.0
5.3	5.4	4.9-5.9
5.4	5.3	4.8-5.8
5.5	5.2	4.7-5.7
5.6	5.2	4.7-5.7
5.7	5.1	4.6-5.6
5.8	5.0	4.5-5.5
5.9	4.9	4.4-5.4
6.0	4.8	4.3-5.3



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 520/521 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-031

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.4	12.9-13.9
0.1	13.3	12.8-13.8
0.2	13.3	12.8-13.8
0.3	13.2	12.7-13.7
0.4	13.1	12.6-13.6
0.5	13.1	12.6-13.6
0.6	13.0	12.5-13.5
0.7	12.9	12.4-13.4
0.8	12.8	12.3-13.3
0.9	12.7	12.2-13.2
1.0	12.6	12.1-13.1
1.1	12.5	12.0-13.0
1.2	12.5	12.0-13.0
1.3	12.4	11.9-12.9
1.4	12.3	11.8-12.8
1.5	12.3	11.8-12.8
1.6	12.2	11.7-12.7
1.7	12.1	11.6-12.6
1.8	12.0	11.5-12.5
1.9	11.9	11.4-12.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.8	11.3-12.3
2.1	11.7	11.2-12.2
2.2	11.7	11.2-12.2
2.3	11.6	11.1-12.1
2.4	11.5	11.0-12.0
2.5	11.5	11.0-12.0
2.6	11.4	10.9-11.9
2.7	11.3	10.8-11.8
2.8	11.2	10.7-11.7
2.9	11.1	10.6-11.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.0	10.5-11.5
3.1	10.9	10.4-11.4
3.2	10.9	10.4-11.4
3.3	10.8	10.3-11.3
3.4	10.7	10.2-11.2
3.5	10.7	10.2-11.2
3.6	10.6	10.1-11.1
3.7	10.5	10.0-11.0
3.8	10.4	9.9-10.9
3.9	10.3	9.8-10.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.2	9.7-10.7
4.1	10.1	9.6-10.6
4.2	10.1	9.6-10.6
4.3	10.0	9.5-10.5
4.4	9.9	9.4-10.4
4.5	9.9	9.4-10.4
4.6	9.8	9.3-10.3
4.7	9.7	9.2-10.2
4.8	9.6	9.1-10.1
4.9	9.5	9.0-10.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.4	8.9-9.9
5.1	9.3	8.8-9.8
5.2	9.3	8.8-9.8
5.3	9.2	8.7-9.7
5.4	9.1	8.6-9.6
5.5	9.0	8.5-9.5
5.6	8.9	8.4-9.4
5.7	8.8	8.3-9.3
5.8	8.8	8.3-9.3
5.9	8.7	8.2-9.2
6.0	8.6	8.1-9.1



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

NOTES:

- 1) USE WITH EATON 520/521 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES

SK29287-032

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.0	12.5-13.5
0.1	12.9	12.4-13.4
0.2	12.8	12.3-13.3
0.3	12.8	12.3-13.3
0.4	12.7	12.2-13.2
0.5	12.6	12.1-13.1
0.6	12.5	12.0-13.0
0.7	12.4	11.9-12.9
0.8	12.3	11.8-12.8
0.9	12.2	11.7-12.7
1.0	12.2	11.7-12.7
1.1	12.1	11.6-12.6
1.2	12.0	11.5-12.5
1.3	12.0	11.5-12.5
1.4	11.9	11.4-12.4
1.5	11.8	11.3-12.3
1.6	11.7	11.2-12.2
1.7	11.6	11.1-12.1
1.8	11.5	11.0-12.0
1.9	11.4	10.9-11.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.4	10.9-11.9
2.1	11.3	10.8-11.8
2.2	11.2	10.7-11.7
2.3	11.2	10.7-11.7
2.4	11.1	10.6-11.6
2.5	11.0	10.5-11.5
2.6	10.9	10.4-11.4
2.7	10.8	10.3-11.3
2.8	10.7	10.2-11.2
2.9	10.6	10.1-11.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.6	10.1-11.1
3.1	10.5	10.0-11.0
3.2	10.4	9.9-10.9
3.3	10.3	9.8-10.8
3.4	10.2	9.7-10.7
3.5	10.1	9.6-10.6
3.6	10.1	9.6-10.6
3.7	10.0	9.5-10.5
3.8	9.9	9.4-10.4
3.9	9.9	9.4-10.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.8	9.3-10.3
4.1	9.7	9.2-10.2
4.2	9.6	9.1-10.1
4.3	9.5	9.0-10.0
4.4	9.4	8.9-9.9
4.5	9.3	8.8-9.8
4.6	9.3	8.8-9.8
4.7	9.2	8.7-9.7
4.8	9.1	8.6-9.6
4.9	9.0	8.5-9.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.9	8.4-9.4
5.1	8.8	8.3-9.3
5.2	8.8	8.3-9.3
5.3	8.7	8.2-9.2
5.4	8.6	8.1-9.1
5.5	8.6	8.1-9.1
5.6	8.5	8.0-9.0
5.7	8.4	7.9-8.9
5.8	8.3	7.8-8.8
5.9	8.2	7.7-8.7
6.0	8.1	7.6-8.6



NOTE: Use these charts only for vehicles with broken-back axle configurations (do not use with parallel axle installations).

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

C94-6000S00

AXLE GROUP #	APPLICABLE AXLES	AXLE ANGLE CHART SK				
		52"	54"	56"	60"	72"
1	MERITOR 40145/44145	C94-6000S01	C94-6000S02	C94-6000S03	C94-6000S04	C94-6000S05
2	MERITOR 40160	C94-6000S06	C94-6000S07	C94-6000S08	C94-6000S09	C94-6000S10
3	DANA/EATON 404/405/454/DSH40/DSH44/DSP40/DSP41	C94-6000S11	C94-6000S12	C94-6000S13	C94-6000S14	C94-6000S15
4	DANA/EATON DSS40	C94-6000S16	C94-6000S17	C94-6000S18	C94-6000S19	C94-6000S20

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH MERITOR 40145/44145 AXLES, AND 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S01

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.8	13.3-14.3
0.1	13.7	13.2-14.2
0.2	13.7	13.2-14.2
0.3	13.6	13.1-14.1
0.4	13.5	13.0-14.0
0.5	13.4	12.9-13.9
0.6	13.3	12.8-13.8
0.7	13.2	12.7-13.7
0.8	13.2	12.7-13.7
0.9	13.1	12.6-13.6
1.0	13.0	12.5-13.5
1.1	12.9	12.4-13.4
1.2	12.9	12.4-13.4
1.3	12.8	12.3-13.3
1.4	12.7	12.2-13.2
1.5	12.6	12.1-13.1
1.6	12.5	12.0-13.0
1.7	12.4	11.9-12.9
1.8	12.3	11.8-12.8
1.9	12.3	11.8-12.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	12.2	11.7-12.7
2.1	12.1	11.6-12.6
2.2	12.0	11.5-12.5
2.3	11.9	11.4-12.4
2.4	11.8	11.3-12.3
2.5	11.8	11.3-12.3
2.6	11.7	11.2-12.2
2.7	11.6	11.1-12.1
2.8	11.5	11.0-12.0
2.9	11.4	10.9-11.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.3	10.8-11.8
3.1	11.3	10.8-11.8
3.2	11.2	10.7-11.7
3.3	11.1	10.6-11.6
3.4	11.0	10.5-11.5
3.5	10.9	10.4-11.4
3.6	10.8	10.3-11.3
3.7	10.8	10.3-11.3
3.8	10.7	10.2-11.2
3.9	10.6	10.1-11.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.5	10.1-11.1
4.1	10.4	9.9-10.9
4.2	10.3	9.8-10.8
4.3	10.3	9.8-10.8
4.4	10.2	9.7-10.7
4.5	10.1	9.6-10.6
4.6	10.0	9.5-10.5
4.7	9.9	9.4-10.4
4.8	9.8	9.3-10.3
4.9	9.8	9.3-10.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.7	9.2-10.2
5.1	9.6	9.1-10.1
5.2	9.5	9.0-10.0
5.3	9.4	8.9-9.9
5.4	9.4	8.9-9.9
5.5	9.3	8.8-9.8
5.6	9.2	8.7-9.7
5.7	9.1	8.6-9.6
5.8	9.0	8.5-9.5
5.9	9.0	8.5-9.5
6.0	8.9	8.4-9.4

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH MERITOR 40145/44145 AXLES, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S02

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.3	12.8-13.8
0.1	13.2	12.7-13.7
0.2	13.2	12.7-13.7
0.3	13.1	12.6-13.6
0.4	13.0	12.5-13.5
0.5	12.9	12.4-13.4
0.6	12.8	12.3-13.3
0.7	12.7	12.2-13.2
0.8	12.7	12.2-13.2
0.9	12.6	12.1-13.1
1.0	12.5	12.0-13.0
1.1	12.4	11.9-12.9
1.2	12.3	11.8-12.8
1.3	12.2	11.7-12.7
1.4	12.2	11.7-12.7
1.5	12.1	11.6-12.6
1.6	12.0	11.5-12.5
1.7	11.9	11.4-12.4
1.8	11.9	11.4-12.4
1.9	11.8	11.3-12.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.7	11.2-12.2
2.1	11.6	11.1-12.1
2.2	11.5	11.0-12.0
2.3	11.4	10.9-11.9
2.4	11.4	10.9-11.9
2.5	11.3	10.8-11.8
2.6	11.2	10.7-11.7
2.7	11.1	10.6-11.6
2.8	11.0	10.5-11.5
2.9	10.9	10.4-11.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.9	10.4-11.4
3.1	10.8	10.3-11.3
3.2	10.7	10.2-11.2
3.3	10.6	10.1-11.1
3.4	10.5	10.0-11.0
3.5	10.4	9.9-10.9
3.6	10.4	9.9-10.9
3.7	10.3	9.8-10.8
3.8	10.2	9.7-10.7
3.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.0	9.5-10.5
4.1	9.9	9.4-10.4
4.2	9.8	9.3-10.3
4.3	9.7	9.2-10.2
4.4	9.6	9.1-10.1
4.5	9.6	9.1-10.1
4.6	9.5	9.0-10.0
4.7	9.4	8.9-9.9
4.8	9.3	8.8-9.8
4.9	9.2	8.7-9.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.1	8.6-9.6
5.1	9.1	8.6-9.6
5.2	9.0	8.5-9.5
5.3	8.9	8.4-9.4
5.4	8.8	8.3-9.3
5.5	8.7	8.2-9.2
5.6	8.6	8.1-9.1
5.7	8.5	8.0-9.0
5.8	8.4	7.9-8.9
5.9	8.3	7.8-8.8
6.0	8.2	7.7-8.7

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH MERITOR 40160 AXLE, 52" AXLE SPACING, AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S06

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	13.3	12.8-13.8
0.1	13.3	12.8-13.8
0.2	13.2	12.7-13.7
0.3	13.1	12.6-13.6
0.4	13.1	12.6-13.6
0.5	13.0	12.5-13.5
0.6	12.9	12.4-13.4
0.7	12.8	12.3-13.3
0.8	12.8	12.3-13.3
0.9	12.7	12.2-13.2
1.0	12.6	12.1-13.1
1.1	12.5	12.0-13.0
1.2	12.4	11.9-12.9
1.3	12.3	11.8-12.8
1.4	12.2	11.7-12.7
1.5	12.2	11.7-12.7
1.6	12.1	11.6-12.6
1.7	12.0	11.5-12.5
1.8	11.9	11.4-12.4
1.9	11.9	11.4-12.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.8	11.3-12.3
2.1	11.7	11.2-12.2
2.2	11.7	11.2-12.2
2.3	11.6	11.1-12.1
2.4	11.5	11.0-12.0
2.5	11.4	10.9-11.9
2.6	11.4	10.9-11.9
2.7	11.3	10.8-11.8
2.8	11.2	10.7-11.7
2.9	11.1	10.6-11.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	11.0	10.5-11.5
3.1	10.9	10.4-11.4
3.2	10.8	10.3-11.3
3.3	10.8	10.3-11.3
3.4	10.7	10.2-11.2
3.5	10.6	10.1-11.1
3.6	10.6	10.1-11.1
3.7	10.5	10.0-11.0
3.8	10.4	9.9-10.9
3.9	10.3	9.8-10.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	10.2	9.7-10.7
4.1	10.1	9.6-10.6
4.2	10.0	9.5-10.5
4.3	10.0	9.5-10.5
4.4	9.9	9.4-10.4
4.5	9.8	9.3-10.3
4.6	9.7	9.2-10.2
4.7	9.7	9.2-10.2
4.8	9.6	9.1-10.1
4.9	9.5	9.0-10.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	9.5	9.0-10.0
5.1	9.4	8.9-10.9
5.2	9.3	8.8-9.8
5.3	9.2	8.7-9.7
5.4	9.1	8.6-9.6
5.5	9.0	8.5-9.5
5.6	8.9	8.4-9.4
5.7	8.8	8.3-9.3
5.8	8.7	8.2-9.2
5.9	8.6	8.1-9.1
6.0	8.5	8.0-9.0

NOTES:

- 1) USE WITH MERITOR 40160 AXLE, AND 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS OR RZ166 TRI DRIVE INSTALLATIONS W/54" AS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL TANDEM AXLE INSTALLATIONS REFER TO PETERBILT MS 0300.033 FOR TANDEM PARALLEL INSTALLATION PROCEDURES
- 5) WITH RZ166 TRI DRIVE SET FWD AND CTR AXLES AS PARALLEL TANDEMS, AND THEN SET REAR AXLE RELATIVE TO CTR AXLE PER TANDEM BROKEN BACK PROCEDURE AND THESE CHARTS
- 6) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S07

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.9	12.4-13.4
0.1	12.8	12.3-13.3
0.2	12.8	12.3-13.3
0.3	12.7	12.2-13.2
0.4	12.6	12.1-13.1
0.5	12.5	12.0-13.0
0.6	12.4	11.9-12.9
0.7	12.3	11.8-12.8
0.8	12.2	11.7-12.7
0.9	12.2	11.7-12.7
1.0	12.1	11.6-12.6
1.1	12.0	11.5-12.5
1.2	12.0	11.5-12.5
1.3	11.9	11.4-12.4
1.4	11.8	11.3-12.3
1.5	11.7	11.2-12.2
1.6	11.7	11.2-12.2
1.7	11.6	11.1-12.1
1.8	11.5	11.0-12.0
1.9	11.4	10.9-11.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.3	10.8-11.8
2.1	11.2	10.7-11.7
2.2	11.1	10.6-11.6
2.3	11.1	10.6-11.6
2.4	11.0	10.5-11.5
2.5	10.9	10.4-11.4
2.6	10.9	10.4-11.4
2.7	10.8	10.3-11.3
2.8	10.7	10.2-11.2
2.9	10.6	10.1-11.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.5	10.0-11.0
3.1	10.4	9.9-10.9
3.2	10.3	9.8-10.8
3.3	10.3	9.8-10.8
3.4	10.2	9.7-10.7
3.5	10.1	9.6-10.6
3.6	10.1	9.6-10.6
3.7	10.0	9.5-10.5
3.8	9.9	9.4-10.4
3.9	9.8	9.3-10.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE	FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.7	9.2-10.2	5.0	8.9	8.4-9.4
4.1	9.6	9.1-10.1	5.1	8.8	8.3-9.3
4.2	9.5	9.0-10.0	5.2	8.7	8.2-9.2
4.3	9.5	9.0-10.0	5.3	8.7	8.2-9.2
4.4	9.4	8.9-9.9	5.4	8.6	8.1-9.1
4.5	9.3	8.8-9.8	5.5	8.5	8.0-9.0
4.6	9.3	8.8-9.8	5.6	8.4	7.9-8.9
4.7	9.2	8.7-9.7	5.7	8.3	7.8-8.8
4.8	9.1	8.6-9.6	5.8	8.3	7.8-8.8
4.9	9.0	8.5-9.5	5.9	8.2	7.7-8.7
			6.0	8.1	7.6-8.6

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH MERITOR 40160 AXLE, 60" AXLE SPACING, AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S09

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.6	11.1-12.1
0.1	11.6	11.1-12.1
0.2	11.5	11.0-12.0
0.3	11.4	10.9-11.9
0.4	11.4	10.9-11.9
0.5	11.3	10.8-11.8
0.6	11.2	10.7-11.7
0.7	11.1	10.6-11.6
0.8	11.0	10.5-11.5
0.9	10.9	10.4-11.4
1.0	10.8	10.3-11.3
1.1	10.8	10.3-11.3
1.2	10.7	10.2-11.2
1.3	10.6	10.1-11.1
1.4	10.5	10.0-11.0
1.5	10.4	9.9-10.9
1.6	10.3	9.8-10.8
1.7	10.3	9.8-10.8
1.8	10.2	9.7-10.7
1.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.1	9.6-10.6
2.1	10.0	9.5-10.5
2.2	9.9	9.4-10.4
2.3	9.8	9.3-10.3
2.4	9.7	9.2-10.2
2.5	9.6	9.1-10.1
2.6	9.5	9.0-10.0
2.7	9.5	9.0-10.0
2.8	9.4	8.9-9.9
2.9	9.3	8.8-9.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.2	8.7-9.7
3.1	9.1	8.6-9.6
3.2	9.0	8.5-9.5
3.3	9.0	8.5-9.5
3.4	8.9	8.4-9.4
3.5	8.8	8.3-9.3
3.6	8.8	8.3-9.3
3.7	8.7	8.2-9.2
3.8	8.6	8.1-9.1
3.9	8.5	8.0-9.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.4	7.9-8.9
4.1	8.3	7.8-8.8
4.2	8.3	7.8-8.8
4.3	8.2	7.7-8.7
4.4	8.1	7.6-8.6
4.5	8.0	7.5-8.5
4.6	7.9	7.4-8.4
4.7	7.8	7.3-8.3
4.8	7.7	7.2-8.2
4.9	7.7	7.2-8.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	7.6	7.1-8.1
5.1	7.5	7.0-8.0
5.2	7.4	6.9-7.9
5.3	7.3	6.8-7.8
5.4	7.2	6.7-7.7
5.5	7.1	6.6-7.6
5.6	7.0	6.5-7.5
5.7	6.9	6.4-7.4
5.8	6.8	6.3-7.3
5.9	6.7	6.2-7.2
6.0	6.7	6.2-7.2

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH DANA/EATON 404/405/454/DSH40/DSH44/DSP40/DSP41 AXLES, 52" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S11

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.3	11.8-12.8
0.1	12.2	11.7-12.7
0.2	12.2	11.7-12.7
0.3	12.1	11.6-12.6
0.4	12.0	11.5-12.5
0.5	11.9	11.4-12.4
0.6	11.8	11.3-12.3
0.7	11.7	11.2-12.2
0.8	11.6	11.1-12.1
0.9	11.6	11.1-12.1
1.0	11.5	11.0-12.0
1.1	11.4	10.9-11.9
1.2	11.3	10.8-11.8
1.3	11.2	10.7-11.7
1.4	11.1	10.6-11.6
1.5	11.1	10.6-11.6
1.6	11.0	10.5-11.5
1.7	10.9	10.4-11.4
1.8	10.9	10.4-11.4
1.9	10.8	10.3-11.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.7	10.2-11.2
2.1	10.6	10.1-11.1
2.2	10.5	10.0-11.0
2.3	10.4	9.9-10.9
2.4	10.3	9.8-10.8
2.5	10.3	9.8-10.8
2.6	10.2	9.7-10.7
2.7	10.1	9.6-10.6
2.8	10.1	9.6-10.6
2.9	10.0	9.5-10.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.9	9.4-10.4
3.1	9.8	9.3-10.3
3.2	9.7	9.2-10.2
3.3	9.6	9.1-10.1
3.4	9.5	9.0-10.0
3.5	9.5	9.0-10.0
3.6	9.4	8.9-9.9
3.7	9.3	8.8-9.8
3.8	9.2	8.7-9.7
3.9	9.1	8.6-9.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.0	8.5-9.5
4.1	9.0	8.5-9.5
4.2	8.9	8.4-9.4
4.3	8.8	8.3-9.3
4.4	8.8	8.3-9.3
4.5	8.7	8.2-9.2
4.6	8.6	8.1-9.1
4.7	8.5	8.0-9.0
4.8	8.4	7.9-8.9
4.9	8.3	7.8-8.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.2	7.7-8.7
5.1	8.2	7.7-8.7
5.2	8.1	7.6-8.6
5.3	8.0	7.5-8.5
5.4	7.9	7.4-8.4
5.5	7.8	7.3-8.3
5.6	7.7	7.2-8.2
5.7	7.6	7.1-8.1
5.8	7.5	7.0-8.0
5.9	7.4	6.9-7.9
6.0	7.3	6.8-7.8

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH DANA/EATON 404/405/454/DSH40/DSH44/DSP40/DSP41 AXLES, 54" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S12

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.8	11.3-12.3
0.1	11.8	11.3-12.3
0.2	11.7	11.2-12.2
0.3	11.6	11.1-12.1
0.4	11.6	11.1-12.1
0.5	11.5	11.0-12.0
0.6	11.4	10.9-11.9
0.7	11.3	10.8-11.8
0.8	11.2	10.7-11.7
0.9	11.1	10.6-11.6
1.0	11.1	10.6-11.6
1.1	11.0	10.5-11.5
1.2	10.9	10.4-11.4
1.3	10.8	10.3-11.3
1.4	10.7	10.2-11.2
1.5	10.6	10.1-11.1
1.6	10.5	10.0-11.0
1.7	10.5	10.0-11.0
1.8	10.4	9.9-10.9
1.9	10.3	9.8-10.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.3	9.8-10.8
2.1	10.2	9.7-10.7
2.2	10.1	9.6-10.6
2.3	10.0	9.5-10.5
2.4	9.9	9.4-10.4
2.5	9.8	9.3-10.3
2.6	9.8	9.3-10.3
2.7	9.7	9.2-10.2
2.8	9.6	9.1-10.1
2.9	9.5	9.0-10.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	9.4	8.9-9.9
3.1	9.3	8.8-9.8
3.2	9.2	8.7-9.7
3.3	9.2	8.7-9.7
3.4	9.1	8.6-9.6
3.5	9.0	8.5-9.5
3.6	8.9	8.4-9.4
3.7	8.8	8.3-9.3
3.8	8.7	8.2-9.2
3.9	8.7	8.2-9.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	8.6	8.1-9.1
4.1	8.5	8.0-9.0
4.2	8.5	8.0-9.0
4.3	8.4	7.9-8.9
4.4	8.3	7.8-8.8
4.5	8.2	7.7-8.7
4.6	8.1	7.6-8.6
4.7	8.0	7.5-8.5
4.8	8.0	7.5-8.5
4.9	7.9	7.4-8.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.4	7.9-8.9
5.1	8.3	7.8-8.8
5.2	8.2	7.7-8.7
5.3	8.2	7.7-8.7
5.4	8.1	7.6-8.6
5.5	8.0	7.5-8.5
5.6	7.9	7.4-8.4
5.7	7.8	7.3-8.3
5.8	7.7	7.2-8.2
5.9	7.6	7.1-8.1
6.0	7.6	7.1-8.1

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH DANA/EATON 404/405/454/DSH40/DSH44/DSP40/DSP41 AXLES, 60" AXLE SPACING AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S14

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	10.7	10.2-11.2
0.1	10.6	10.1-11.1
0.2	10.6	10.1-11.1
0.3	10.5	10.0-11.0
0.4	10.4	9.9-10.9
0.5	10.3	9.8-10.8
0.6	10.2	9.7-10.7
0.7	10.1	9.6-10.6
0.8	10.1	9.6-10.6
0.9	10.0	9.5-10.5
1.0	9.9	9.4-10.4
1.1	9.8	9.3-10.3
1.2	9.7	9.2-10.2
1.3	9.6	9.1-10.1
1.4	9.6	9.1-10.1
1.5	9.5	9.0-10.0
1.6	9.4	8.9-9.9
1.7	9.3	8.8-9.8
1.8	9.2	8.7-9.7
1.9	9.1	8.6-9.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	9.1	8.6-9.6
2.1	9.0	8.5-9.5
2.2	8.9	8.4-9.4
2.3	8.8	8.3-9.3
2.4	8.7	8.2-9.2
2.5	8.6	8.1-9.1
2.6	8.6	8.1-9.1
2.7	8.5	8.0-9.0
2.8	8.4	7.9-8.9
2.9	8.3	7.8-8.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	8.2	7.7-8.7
3.1	8.1	7.6-8.6
3.2	8.1	7.6-8.6
3.3	8.0	7.5-8.5
3.4	7.9	7.4-8.4
3.5	7.8	7.3-8.3
3.6	7.7	7.2-8.2
3.7	7.6	7.1-8.1
3.8	7.6	7.1-8.1
3.9	7.5	7.0-8.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	7.4	6.9-7.9
4.1	7.3	6.8-7.8
4.2	7.2	6.7-7.7
4.3	7.1	6.6-7.6
4.4	7.1	6.6-7.6
4.5	7.0	6.5-7.5
4.6	6.9	6.4-7.4
4.7	6.8	6.3-7.3
4.8	6.7	6.2-7.2
4.9	6.6	6.1-7.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	6.6	6.1-7.1
5.1	6.5	6.0-7.0
5.2	6.4	5.9-6.9
5.3	6.3	5.8-6.8
5.4	6.2	5.7-6.7
5.5	6.1	5.6-6.6
5.6	6.0	5.5-6.5
5.7	5.9	5.4-6.4
5.8	5.8	5.3-6.3
5.9	5.7	5.2-6.2
6.0	5.6	5.1-6.1

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH EATON DSS40 AXLE, 52" AXLE SPACING, AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S16

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.9	12.4-13.4
0.1	12.8	12.3-13.3
0.2	12.7	12.2-13.2
0.3	12.6	12.1-13.1
0.4	12.5	12.0-13.0
0.5	12.4	11.9-12.9
0.6	12.3	11.8-12.8
0.7	12.3	11.8-12.8
0.8	12.2	11.7-12.7
0.9	12.1	11.6-12.6
1.0	12.1	11.6-12.6
1.1	12.0	11.5-12.5
1.2	11.9	11.4-12.4
1.3	11.8	11.3-12.3
1.4	11.7	11.2-12.2
1.5	11.6	11.1-12.1
1.6	11.5	11.0-12.0
1.7	11.5	11.0-12.0
1.8	11.4	10.9-11.9
1.9	11.3	10.8-11.8

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	11.3	10.8-11.8
2.1	11.2	10.7-11.7
2.2	11.1	10.6-11.6
2.3	11.0	10.0-11.0
2.4	10.9	10.4-11.4
2.5	10.8	10.3-11.3
2.6	10.7	10.2-11.2
2.7	10.7	10.2-11.2
2.8	10.6	10.1-11.1
2.9	10.5	10.0-11.0

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.5	10.0-11.0
3.1	10.4	9.9-10.9
3.2	10.3	9.8-10.8
3.3	10.2	9.7-10.7
3.4	10.1	9.6-10.6
3.5	10.0	9.5-10.5
3.6	9.9	9.4-10.4
3.7	9.9	9.4-10.4
3.8	9.8	9.3-10.3
3.9	9.7	9.2-10.2

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.7	9.2-10.2
4.1	9.6	9.1-10.1
4.2	9.5	9.0-10.0
4.3	9.4	8.9-9.9
4.4	9.3	8.8-9.8
4.5	9.2	8.7-9.7
4.6	9.1	8.6-9.6
4.7	9.1	8.6-9.6
4.8	9.0	8.5-9.5
4.9	8.9	8.4-9.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.9	8.4-9.4
5.1	8.8	8.3-9.3
5.2	8.7	8.2-9.2
5.3	8.6	8.1-9.1
5.4	8.5	8.0-9.0
5.5	8.4	7.9-8.9
5.6	8.3	7.8-8.8
5.7	8.2	7.7-8.7
5.8	8.1	7.6-8.6
5.9	8.0	7.5-8.5
6.0	7.9	7.4-8.4

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH EATON DSS40 AXLE, 54" AXLE SPACING, AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS
REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S17

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	12.4	11.9-12.9
0.1	12.3	11.8-12.8
0.2	12.2	11.7-12.7
0.3	12.1	11.6-12.6
0.4	12.0	11.5-12.5
0.5	12.0	11.5-12.5
0.6	11.9	11.4-12.4
0.7	11.8	11.3-12.3
0.8	11.8	11.3-12.3
0.9	11.7	11.2-12.2
1.0	11.6	11.1-12.1
1.1	11.5	11.0-12.0
1.2	11.4	10.9-11.9
1.3	11.3	10.8-11.8
1.4	11.2	10.7-11.7
1.5	11.2	10.7-11.7
1.6	11.1	10.6-11.6
1.7	11.0	10.5-11.5
1.8	11.0	10.5-11.5
1.9	10.9	10.4-11.4

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	10.8	10.3-11.3
2.1	10.7	10.2-11.2
2.2	10.6	10.1-11.1
2.3	10.5	10.0-11.0
2.4	10.4	9.9-10.9
2.5	10.4	9.9-10.9
2.6	10.3	9.8-10.8
2.7	10.2	9.7-10.7
2.8	10.2	9.7-10.7
2.9	10.1	9.6-10.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	10.0	9.5-10.5
3.1	9.9	9.4-10.4
3.2	9.8	9.3-10.3
3.3	9.7	9.2-10.2
3.4	9.7	9.2-10.2
3.5	9.6	9.1-10.1
3.6	9.5	9.0-10.0
3.7	9.4	8.9-9.9
3.8	9.3	8.8-9.8
3.9	9.2	8.7-9.7

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	9.1	8.6-9.6
4.1	9.1	8.6-9.6
4.2	9.0	8.5-9.5
4.3	8.9	8.4-9.4
4.4	8.8	8.3-9.3
4.5	8.7	8.2-9.2
4.6	8.6	8.1-9.1
4.7	8.6	8.1-9.1
4.8	8.5	8.0-9.0
4.9	8.4	7.9-8.9

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	8.4	7.9-8.9
5.1	8.3	7.8-8.8
5.2	8.2	8.7-9.7
5.3	8.1	8.6-9.6
5.4	8.0	7.5-8.5
5.5	7.9	7.4-8.4
5.6	7.8	7.3-8.3
5.7	7.7	7.2-8.2
5.8	7.6	7.1-8.1
5.9	7.5	7.0-8.0
6.0	7.4	6.9-7.9

Use With Low Air Leaf Suspensions Built On And After April 5, 2004

NOTES:

- 1) USE WITH EATON DSS40 AXLE, 60" AXLE SPACING, AND BROKEN BACK INSTALLATIONS ONLY
- 2) ALL ANGLES IN CHARTS ARE RELATIVE TO GROUND
- 3) REFERENCE PETERBILT MS 0300.033 FOR AXLE ANGLE PROCEDURE
- 4) DO NOT USE THIS CHART WITH PARALLEL AXLE INSTALLATIONS REFER TO PETERBILT MS 0300.033 FOR PARALLEL INSTALLATION PROCEDURES
- 5) THESE CHARTS ARE FOR LOW AND LOW-LOW AIR LEAF ONLY. ADD 0.5 DEG TO FWD REAR AND 0.2 DEG TO REAR REAR AXLE UNLADEN ANGLES TO OBTAIN EQUIVALENT LADEN ANGLES.

C94-6000S19

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
0.0	11.2	10.7-11.7
0.1	11.1	10.6-11.6
0.2	11.0	10.5-11.5
0.3	10.9	10.4-11.4
0.4	10.8	10.3-11.3
0.5	10.8	10.3-11.3
0.6	10.7	10.2-11.2
0.7	10.6	10.1-11.1
0.8	10.6	10.1-11.1
0.9	10.5	10.0-11.0
1.0	10.4	9.9-10.9
1.1	10.3	9.8-10.8
1.2	10.2	9.7-10.7
1.3	10.1	9.6-10.6
1.4	10.1	9.6-10.6
1.5	10.0	9.5-10.5
1.6	9.9	9.4-10.4
1.7	9.8	9.3-10.3
1.8	9.7	9.2-10.2
1.9	9.6	9.1-10.1

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
2.0	9.6	9.1-10.1
2.1	9.5	9.0-10.0
2.2	9.4	8.9-9.9
2.3	9.3	8.8-9.8
2.4	9.2	8.7-9.7
2.5	9.1	8.6-9.6
2.6	9.1	8.6-9.6
2.7	9.0	8.5-9.5
2.8	8.9	8.4-9.4
2.9	8.8	8.3-9.3

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
3.0	8.7	8.2-9.2
3.1	8.6	8.1-9.1
3.2	8.6	8.1-9.1
3.3	8.5	8.0-9.0
3.4	8.4	7.9-8.9
3.5	8.3	7.8-8.8
3.6	8.2	7.7-8.7
3.7	8.1	7.6-8.6
3.8	8.1	7.6-8.6
3.9	8.0	7.5-8.5

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
4.0	7.9	7.4-8.4
4.1	7.8	7.3-8.3
4.2	7.7	7.2-8.2
4.3	7.6	7.1-8.1
4.4	7.6	7.1-8.1
4.5	7.5	7.0-8.0
4.6	7.4	6.9-7.9
4.7	7.3	6.8-7.8
4.8	7.2	6.7-7.7
4.9	7.1	6.6-7.6

FWD AXLE ANGLE	REAR AXLE ANGLE	REAR DRIVER RANGE
5.0	7.1	6.6-7.6
5.1	7.0	6.5-7.5
5.2	6.9	6.4-7.4
5.3	6.8	6.3-7.3
5.4	6.7	6.2-7.2
5.5	6.6	6.1-7.1
5.6	6.5	6.0-7.0
5.7	6.4	5.9-6.9
5.8	6.3	5.8-6.8
5.9	6.2	5.7-6.7
6.0	6.1	5.6-6.6